

**STATEMENT OF WORK
FOR THE
MINE CLEARANCE LAUNCHER
MK 154
NSN 1055-01-226-6338
Inspect Repair Only As Necessary
(IROAN)
B1315**

TABLE OF CONTENTS

1.0 SCOPE	1
1.1 Background	1
2.0 APPLICABLE DOCUMENTS	1
2.1 Military Specifications	1
2.2 Military Standards	1
2.3 Other Government Documents and Publications	1
2.4 Industry Standards	2
3.0 REQUIREMENTS	3
3.1 General Tasks	3
3.2 Detail Tasks	3
3.2.1 Phase I – Pre-Induction	3
3.2.2 Phase II –IROAN	3
3.2.3 Phase III - Inspection, Testing and Acceptance	5
3.2.4 Phase IV - Packaging, Handling, Storage, and Transportation (PHS&T)	6
3.3 Configuration Management	6
3.3.1 Configuration Status Accounting (CSA)	6
3.3.2 Configuration Control	6
3.4 Quality Assurance Provisions	7
3.5 Acceptance	7
3.6 Rejection	7
3.7 Government Furnished Equipment/Government Furnished Materiel	7
3.8 Contractor Furnished Materiel	7
4.0 REPORTS	8
4.1 Repairable Item Inspection Report	8
4.2 Monthly Progress Reports	8
4.3 Pre-Induction Checklist	8
Appendix A Pre-Induction Inspection Checklist	A-1
Appendix B List of Defective Parts and Assemblies	B-1
Appendix C List of Repair Parts and Assemblies Required for Repairs	C-1

STATEMENT OF WORK FOR THE
MINE CLEARANCE LAUNCHER MK 154
NSN 1055-01-226-6338
Inspect Repair Only As Necessary (IROAN)

1.0 SCOPE. This Statement of Work (SOW) establishes and sets forth tasks and identifies the work efforts that shall be performed by the Contractor in the IROAN effort of the MINE CLEARANCE LAUNCHER MK 154, hereafter referred to as the MK 154. This document contains requirements to restore the MK 154 to Condition Code "A". Condition Code "A" is defined as "serviceable/issuable without qualification, new, used, repaired or reconditioned materiel which is serviceable and issuable to all customers without limitation or restriction, including materiel with more than six months shelf-life remaining." National Stock Number (NSN) 1055-01-226-6338 shall be known as the MK 154.

1.1 Background. IROAN is defined as "That maintenance technique which determines the minimum repairs necessary to restore equipment components or assemblies to prescribed maintenance serviceability standards by utilizing all available diagnostic equipment and test procedures in order to minimize disassembly and parts replacement."

2.0 APPLICABLE DOCUMENTS. The following documents form a part of this SOW to the extent specified. Unless otherwise specified, the issues of these documents are those listed in the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto which is in effect on the date of solicitation. In the event of conflict between the documents referenced herein and the contents of this SOW, the contents of this SOW shall be the superseding requirement.

2.1 Military Specifications.

MIL-C-46168	Coating, Aliphatic Polyurethane, Chemical Agent Resistant
MIL-C-53039	Coating, Aliphatic Polyurethane, Single Component, Chemical Agent Resistant

2.2 Military Standards.

MIL-STD-129	DoD Standard Practice for Military Marking
MIL-STD-130	Identification Marking of US Military Property
MIL-STD-461	Requirements for the control of Electromagnetic Interference Emission and Susceptibility

2.3 Other Government Documents And Publications.

DOD 4000.25-1-M	MILSTRIP Manual
DOD 4160.21-M	Defense Materiel Demilitarization Manual
SL-3-09962A	Launcher, Mine Clearance MK 154 Mod 0
TM 09962A-13&P/2	Mark 1 Mod 0 Mine Clearance System
TI-09962A-35/1	Fabrication and Installation of Electrical Connector Guard for the Launcher, Mine Clearance MK 154
TM 3080-12	Corrosion Prevention and Control for Marine Corps Equipment
TM 3080-50	Corrosion Control Procedures Depot Maintenance Activities for Marine Corps Equipment
TM 4700-15/1H	Ground Equipment Record Procedures
TM 4750-15/1	Painting and Registration Marking for Marine Corps Combat and Tactical Equipment
TM 4750-15/2	Camouflage Paint Patterns
Engineering Drawing 835028A0000 CAGE 01365	Mine Clearance Launcher, MK154, Marine Corps
Engineering Drawing 835028B0000 CAGE 01365	Container Assembly for MK 154 Marine Corps

Military Handbooks (For Guidance)

MIL-HDBK-61	Configuration Management Guidance
-------------	-----------------------------------

2.4 Industry Standards.

ANSI/ISO/ASQC Q9002-1994	- Quality Systems-Model for Quality Assurance in Production, Installation, and Servicing
ASTM D 3951	Standard Practice for Commercial Packaging

Industry Standards (For Guidance)

ANSI/EIA-649

National Consensus Standard for Configuration Management

Copies of Military Standards and Specifications are available from the DOD Single Stock Point, Document Automation and Production Service, Building 4/D, 700 Robbins Avenue, Philadelphia, PA 19111-5094, Telephone (215) 697-2179 or DSN 442-2179, or <http://www.dodssp.daps.mil>. Copies of other government documents and publications required by contractors in connection with specific SOW requirements shall be obtained through the Contracts Department, (Code 891), P. O. Drawer 43019, 814 Radford Blvd., MCLB, Albany, GA 31704-3019, commercial telephone number (229) 639-6753 or DSN 567-6753. Copies of engineering drawings, if applicable, may be obtained by contacting Supply Chain Management Center, Attn: Code 583-1, 814 Radford Blvd., Suite 20320, Albany, Georgia, 31704-0320, commercial telephone number (229) 639-6410 or DSN 567-6410.

3.0 REQUIREMENTS

3.1 General Tasks. In fulfilling the specified requirements, the Contractor shall:

a. Provide materials, labor, facilities, missing parts, and repair parts necessary to inspect, diagnose, restore, and test the MK 154. Upon completion of IROAN, repaired equipment shall be Condition Code "A".

b. Provide all tools and test equipment required to test, inspect, repair, and calibrate the MK 154.

c. Conduct in process and final on-site testing for witness by a Marine Corps Systems Command (MCSC), (Code CSLE), Albany, Georgia representative.

d. Be responsible for all structural, electrical and mechanical requirements associated with the restoration of the MK 154.

3.2 Detail Tasks. The following tasks describe the different phases for IROAN of the MK 154.

3.2.1 Phase I - Pre-Induction. The contractor shall perform a Pre-Induction Inspection Analysis for each MK 154 using the Contractor's diagnosis, inspection and testing techniques to determine extent of work and parts required. This inspection shall include all items associated with the MK 154 as found in SL-3-09962A, TM 09962A-13&P/2, and TI-09962A-35/1. These findings shall be annotated on a Pre-Induction Check List (Appendix A) and shall be provided to the government in accordance with Paragraph 4.0 of this SOW.

3.2.2 Phase II - IROAN. After Pre-Induction Tests and Inspections have been completed, repair of the MK 154 shall be accomplished by the contractor in accordance with this SOW.

Deficiencies noted on the Pre-Induction Checklist, (Appendix A), during Phase I shall be repaired/replaced. The contractor shall use the "List of Defective Parts and Assemblies (Appendix B)" to list all defective parts and assemblies. The contractor shall also use the "List of Repair Parts and Assemblies Required for Repairs (Appendix C)", to report the parts used on the repaired MK 154. Components or assemblies shall not be disassembled for replacement of mandatory parts unless that part has failed, or the component assembly wherein the part is located is disassembled for repair.

a. Pre-Induction Inspection Checklist - Information recorded on the Pre-Induction Inspection Checklist (Appendix A) shall be used as a guide to repair the MK 154 system in accordance with this SOW.

b. Technical Instruction (TI) - All TI's not previously applied to the MK 154 shall be applied during the IROAN and shall be annotated on Equipment Record Jacket in accordance with TM 4700-15/1H.

c. Corrosion - For corrosion prevention and treatment use TM 3080-12 and TM 3080-50.

d. Fluid Leaks - The following shall be used as a guide in determining degree of fluid loss:

(1) Class I - Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.

(2) Class II - Leakage of fluid great enough to form drops, but not enough to cause drops to fall from the item being checked/inspected.

(3) Class III - Leakage of fluid great enough to form drops that fall from the item being checked/inspected.

NOTE: A Class I leak, except in fuel or brake systems, is an acceptable condition at any time and does not require corrective action.

e. Belts - Replace all.

f. Data Plates - All required data plates and decals shall be in place and shall be legible. Each repaired MK 154 shall have an IROAN data plate affixed to the main unit in close proximity to the existing data plate. The data plate shall meet the requirements of MIL-STD-130 and TM 4750-15/1 and shall contain the Equipment Serial Number, date of IROAN, Date of SOW, SOW number, and Company name of contractor completing work.

g. Painting/Coating (Exterior/Interior) - If painting/coating is required, the MK 154 shall be cleaned in accordance with TM 3080-50, Chapter 4, and coated with Aliphatic Polyurethane Coating, in accordance with MIL-C-46168 or MIL-C-53039 using TM 4750-15/2 as pattern guidance if required.

h. Demilitarization - All end items that are identified as non-repairable and require demilitarization codes, shall be reported to the MCSC, (Code CSLE), Albany, Georgia representatives, who will provide disposition instructions in accordance with DOD 4160.21-M.

i. Electromagnetic Emission - All requirements pertaining to control of electromagnetic interference, emission and susceptibility shall be in accordance with MIL-STD-461.

j. Hardware.

(1) Replace broken, unserviceable and/or missing hardware including nuts, bolts, screws, washers, turnlock fasteners, mandatory, safety and one-time use items, etc., in accordance with TM 09962A-13&P/2. Unserviceable would include any of the above that failed to function properly.

(2) Ensure proper hardware locking devices are present and operational on all moving mechanical assemblies.

(3) Hardware normally supplied with commercial parts shall be used unless specifically prohibited.

k. Hoses - All hoses and fittings shall be visually inspected for damage or deterioration. Any hose showing signs of leakage, kinking or separation of outer coating shall be replaced. This inspection shall be performed during the Operational Test Inspection (OTI) of the MK 154.

l. Cable Assemblies - All cables and cable connections shall be tested and visually inspected for damage or corrosion. Any cable or cable connector showing signs of damage, corrosion or separation of outer coating shall be repaired/replaced and tested with its respective component/assembly to assure satisfactory compliance with all operational tests.

m. Filters - Replace all.

3.2.3 Phase III - Inspection, Testing and Acceptance.

a. The contractor shall conduct Inspection, Testing and Acceptance of the MK 154 in accordance with TM 09962A-13&P/2.

b. The Contractor shall be responsible for conducting required tests and shall ensure all necessary personnel are available to complete the final acceptance. Acceptance tests shall be held at the Contractor Facility. MCSC (Code CSLE), Albany, Georgia, representatives shall be given a minimum of two weeks notice prior to beginning acceptance testing. The test area shall be cleared of all equipment parts, components, etc., not required for the test.

c. The Contractor shall be responsible for correcting any deficiencies identified during inspection/testing. MCSC (Code CSLE), Albany, Georgia, representatives may require the

Contractor to repeat tests, or portions thereof, if the original tests fail to demonstrate compliance with this SOW.

d. Acceptance Testing/Operational Tests on all MK 154 repaired under the provisions of this SOW shall be accomplished, by the contractor, in accordance with TM 09962A-13&P/2. Operational Tests are to be conducted on each MK 154 upon completion of repairs and prior to the equipment being returned to stock, to insure the unit will perform as required.

3.2.4 Phase IV - Packaging, Handling, Storage, and Transportation (PHS&T).

a. The Contractor shall be responsible for preservation and packaging of item(s) being repaired under the terms of this statement of work. All items shall be in accordance with the best commercial practices of ASTM D 3951.

b. Marking for shipment and storage shall be in accordance with MIL-STD-129.

c. The Marine Corps will provide the contractor with the shipping address(es) for delivery of the repaired equipment. The contractor shall be responsible for arranging for shipment to the pre-designated site(s). The Marine Corps will be responsible for transportation costs associated with shipping the subject equipment to and from the contractor.

3.3 Configuration Management.

3.3.1 Configuration Status Accounting (CSA).

a. The contractor shall record and submit data on retrofit accomplished during Phase II. Any approved Modifications Instructions (MIs) or Engineering Change Proposals (ECPs) not previously applied shall be incorporated during Phase II of the IROAN process.

b. The Contractor shall determine the application status of approved configuration changes by visual inspections to the extent possible. The government will identify the configuration changes to be inspected by furnishing a Configuration Inspection Checklist to the Contractor. The Contractor shall use one checklist per MK 154 to record the inspection findings along with other required data.

c. The Contractor shall record serial numbers of the assemblies listed on the Configuration Inspection Checklist. The Contractor shall also record the information on the Equipment Record Jacket in accordance with TM 4700-15/1H.

3.3.2 Configuration Control. The contractor shall apply configuration control procedures to established configuration items. The baseline configuration for the MK 154 has been established by Marine Corps Drawing numbers 835028A0000, CAGE 01365, for the Mine Clearance Launcher, and 835028B0000, CAGE 01365, for the container and applicable MIs and ECPs. The contractor shall not implement configuration changes to an item's documented performance or design characteristics without prior written authorization. If it is necessary to temporarily depart

from the authorized configuration, the contractor shall prepare and submit a Request for Deviation. MIL-HDBK-61 and ANSI/EIA-649 provide guidance for preparing this configuration control document.

3.4 Quality Assurance Provisions. The Contractor shall provide and maintain a Quality System that as minimum adheres to the requirements of ANSI/ISO/ASQC Q9002-1994 Quality Systems-Model for Quality Assurance in Production, Installation, and Servicing.

3.5 Acceptance. The performance of the Contractor and the quality of work delivered, including all equipment furnished and documentation written or compiled, shall be subject to in-process review and inspection during performance. Inspection may be accomplished in-plant or at any work site or location, and MCSC (Code CSLE), Albany, Georgia representatives shall be permitted to observe the work or to conduct inspection at all reasonable hours. Final Inspection and Acceptance Testing shall be conducted at the Contractor Facility. Final acceptance shall be conducted on 100 percent of items to verify that the units meet all requirements.

3.6 Rejection. Failure to comply with any of the specified requirements listed herein shall be reason for rejection by MCSC (Code CSLE), Albany, Georgia. The Contractor shall, at no additional cost to MCSC (Code CSLE), Albany, Georgia, provide the following:

a. Develop an approach for modification or correction of all deficiencies.

b. Upon approval of a documented approach, the Contractor shall correct the deficiencies and repeat the verification until an acceptable compliance with acceptance test procedures is demonstrated.

3.7 Government Furnished Equipment (GFE)/Government Furnished Materiel (GFM). The Management Control Activity (MCA/Code 573-2) will coordinate Government Furnished Equipment/Government Furnished Materiel (GFE)/(GFM) requests and maintain a central control system on all government owned assets in the contractor's possession. The MCA will forward a GFE Accountability Agreement to the contractor for signature on an annual basis to establish a chain of custody and identify property responsibilities for Marine Corps assets. The contractor is to acknowledge receipt of GFM to the MCA within 15 days of receipt. (This can be done by mailing (Materiel Management Department, Management Control Activity (Code 573-2) 814 Radford Blvd, STE 20320, Albany, GA 31704-0320) or faxing (commercial 229-639-5498 or DSN 567-5498) a copy of the DD1348).

3.8 Contractor Furnished Materiel (CFM). The Contractor may requisition materiel as required in the performance of the SOW through the DoD Supply System. DoD 4000.25-1-M (MILSTRIP) Chapter 11 provides guidance to contractors on the requisitioning process. The contractor's decision to utilize CFM procured from the DoD Supply System shall be based upon cost effectiveness, availability of materiel and the required completion/delivery date.

4.0 **REPORTS.** All report deliverables shall be submitted in hard copy to Commander, (Code CSLE), 814 Radford Blvd., Suite 20320, Albany, Georgia 31704-0320, unless directed otherwise in a Contract Data Requirements List.

4.1 **Repairable Item Inspection Report.** The Contractor shall provide a Repairable Item Inspection Report for each MK 154. The report shall be identified by United States Marine Corps Serial Number and be sent to MCSC Code CSLE, Albany, Georgia.

4.2 **Monthly Progress Reports.** The Contractor shall provide Monthly Progress Reports summarizing the progress and status of the IROAN Program. The reports shall identify, by United States Marine Corps Serial Number, each MK155 inducted for repair. This report shall be sent to MCSC Code CSLE, Albany, Georgia.

4.3 **Pre-Induction Checklist.** The Contractor shall complete the, Pre-Induction Inspection Checklist (Appendix A), List of Defective Parts and Assemblies (Appendix B), List of Repair Parts and Assemblies Required for Repairs (Appendix C), for each MK 154 repaired. These documents shall be available during final acceptance testing. One copy of each document shall be provided to MCSC (Code CSLE), Albany, Georgia, 30 days after final acceptance of each MK 154 in PDF Format Media.

The inspection checklist shall contain, but not be limited to the following:

- (1) MK 154 serial number. Appendix A, B, and C.
- (2) Condition Code of MK 154 at receipt. Appendix A.
- (3) Results of operational test. Appendix A.
- (4) List of defective parts and assemblies. Appendix B.
- (5) List of repair parts and assemblies required for repairs. Appendix C.
- (6) Corrosion prevention methods that shall be used will be documented on the first page of Appendix A.

Pre-Induction Inspection
Checklist
APPENDIX A

MK154 Serial number: _____ Condition Code at receipt: _____

Results of operational test:

Corrosion prevention methods that shall be used.

Inspect all components for operating/malfunction/defective parts per TM 09962A-13&P/2.
Visually check components for leaks, damage, loose parts & hardware. No disassembly of
components is allowed unless the component is determined to be defective.

Checklist APPENDIX A

COMPONENT	PASS	FAIL	REMARKS:
Mast Assy	_____	_____	_____
External-Actuator Cover	_____	_____	_____
Actuator Arm Lever	_____	_____	_____
Housing to Actuator Assy	_____	_____	_____
Hose Assy, Starboard	_____	_____	_____
Starboard Actuator Manifold	_____	_____	_____
Starboard Actuator Assy	_____	_____	_____
Housing-Actuator Hydraulic	_____	_____	_____
Hose Assy, Port	_____	_____	_____
Housing - Actuator Hydraulic	_____	_____	_____
System, Port	_____	_____	_____
Port Actuator Manifold	_____	_____	_____
Port Actuator Assy	_____	_____	_____
Starboard/Port Hinge Arm	_____	_____	_____
Starboard Door Assy	_____	_____	_____
Door Seals	_____	_____	_____
Door Latch Rod, Starboard Door	_____	_____	_____
Port Door Assy	_____	_____	_____
Wiring Harness W16	_____	_____	_____
Platform, Equipped for Access	_____	_____	_____
Launcher Cylinder Hydraulic Hose Assy	_____	_____	_____
Launch Cylinder Hose Assys	_____	_____	_____
Launcher Cylinder	_____	_____	_____
Launcher Cylinder Swivel Joint	_____	_____	_____
Elevation Cylinder Hose Assys	_____	_____	_____
Elevation Cylinder Swivel Joint & Elbows	_____	_____	_____
Elevation Cylinder Assy	_____	_____	_____
Elevation Cylinder Manifold	_____	_____	_____
Elevation Cylinder	_____	_____	_____
Turnbuckle Connecting Rod	_____	_____	_____
Elevation Cylinder Linkage Adjustment	_____	_____	_____
Connecting Rod	_____	_____	_____
Pivot Pin	_____	_____	_____
Pivot Bearings	_____	_____	_____
Center Sheath	_____	_____	_____
Shield	_____	_____	_____
Launcher Platform Rail	_____	_____	_____
Travel Lock Assy	_____	_____	_____
Pivot Assy	_____	_____	_____
Bumper	_____	_____	_____
Stop	_____	_____	_____
Bracket, Connecting Rod	_____	_____	_____
Mercury Switch Box	_____	_____	_____
Pendulum Box Assy	_____	_____	_____
Rockets Power Distribution Box	_____	_____	_____
Rocker Arm	_____	_____	_____
Support Arm	_____	_____	_____
Arm Sheath	_____	_____	_____

Checklist APPENDIX A

COMPONENT	PASS	FAIL	REMARKS:
Port/Starboard Intermediate Sheath	_____	_____	_____
Sequence Lock Manifold	_____	_____	_____
Sequence Lock Manifold Hydraulic Assys	_____	_____	_____
Support Arm Tube Assys	_____	_____	_____
Elbow	_____	_____	_____
Elbow Bracket	_____	_____	_____
Three-Hole Bulkhead	_____	_____	_____
Tube Angle Mounting	_____	_____	_____
Launcher Housing Tube Assy	_____	_____	_____
Junction Box A	_____	_____	_____
Junction Box B	_____	_____	_____
Limit Switch	_____	_____	_____
Limit Switch Arm Bracket	_____	_____	_____
Wiring Harness W15	_____	_____	_____
Latch Pivot Bracket	_____	_____	_____
Latch Spring	_____	_____	_____
Test Plugs	_____	_____	_____
Nipple	_____	_____	_____
Coupler	_____	_____	_____
Lower Seal	_____	_____	_____
Sheath	_____	_____	_____
Intermediate Housing Sheath	_____	_____	_____
Port Housing Guard	_____	_____	_____
Starboard Housing Guard	_____	_____	_____
Forward Port Housing Guard	_____	_____	_____
Aft Port Housing Guard	_____	_____	_____
Forward Starboard Housing Guard	_____	_____	_____
Aft Starboard Housing Guard	_____	_____	_____
Port/Starboard Bar	_____	_____	_____
Swivel Elbow (Port H2)	_____	_____	_____
Tie-Down and Adapter Assy	_____	_____	_____
Tie-Down Adapter	_____	_____	_____
Tie-Down Assy	_____	_____	_____
Aft Wall Guard	_____	_____	_____
Aft Guard Assy	_____	_____	_____
Aft Port Guard	_____	_____	_____
Aft Starboard Guard	_____	_____	_____
Forward Guard Assy	_____	_____	_____
Cable Guide	_____	_____	_____
Starboard Cable Guide	_____	_____	_____
Aft Port Cable Guide	_____	_____	_____
Lower Engine Access Cover Latch	_____	_____	_____
Upper Engine Access Cover Striker	_____	_____	_____
Rail	_____	_____	_____
Center Channel Assy	_____	_____	_____
Aft Pallet Rail Tie-Down Bracket	_____	_____	_____
Port/Starboard Ramp	_____	_____	_____
Rear Pallet Assy	_____	_____	_____

Checklist

APPENDIX A

COMPONENT	PASS	FAIL	REMARKS:
Wear Plate	_____	_____	_____
Quick Release Pins	_____	_____	_____
Starboard Ramp Crossmember	_____	_____	_____
Ramp Wear Plates	_____	_____	_____
Aft Pallet	_____	_____	_____
Forward Pallet Assy	_____	_____	_____
Housing to Forward Pallet Hose Assys	_____	_____	_____
Capstan Hydraulic Hose Assy	_____	_____	_____
Forward Pallet Rail Tie-Down Bracket	_____	_____	_____
Quick Disconnect Coupler Fitting	_____	_____	_____
Power Distribution Box Assy	_____	_____	_____
Quick Disconnect Nipple Fitting	_____	_____	_____
200A Circuit Breaker	_____	_____	_____
2A Circuit Breaker	_____	_____	_____
10A Circuit Breaker	_____	_____	_____
200A Relay	_____	_____	_____
10A Relay	_____	_____	_____
Terminal Block	_____	_____	_____
Indicator Light Assy	_____	_____	_____
Toggle Switch	_____	_____	_____
Slave Plug	_____	_____	_____
Capstan with Hydraulic Motor Assy	_____	_____	_____
Capstan Drum	_____	_____	_____
Reduction Gearbox	_____	_____	_____
Reduction Gearbox Lubricating Oils	_____	_____	_____
Reduction Gearbox Oil Change	_____	_____	_____
Hydraulic Filter Change	_____	_____	_____
Capstan Hydraulic Motor	_____	_____	_____
Hydraulic Power Unit	_____	_____	_____
Manual Hydraulic Pump	_____	_____	_____
Manual Hydraulic Pump Handle	_____	_____	_____
Electric Motor/Hydraulic Pump	_____	_____	_____
Electric Motor/Hydraulic Pump	_____	_____	_____
Control Manifold	_____	_____	_____
Reservoir Assy	_____	_____	_____
Sight Glass	_____	_____	_____
Relief Valve	_____	_____	_____
Pressure Gauge	_____	_____	_____
Manual Pump Outlet Tube	_____	_____	_____
Manual Pump Inlet Tube	_____	_____	_____
Clip Spring	_____	_____	_____
Hydraulic Pump Inlet Tube	_____	_____	_____
Hydraulic Pump Outlet Tube	_____	_____	_____
Wiring Harness W12	_____	_____	_____
Wiring Harness W13	_____	_____	_____
Wiring Harness W14	_____	_____	_____
Arm Switch	_____	_____	_____
Control Box	_____	_____	_____

Checklist

APPENDIX A

COMPONENT	PASS	FAIL	REMARKS:
Control Box & Mounting	_____	_____	_____
Brackets Assy	_____	_____	_____
Brackets	_____	_____	_____
Lamps	_____	_____	_____
Selector Knob	_____	_____	_____
Toggle Switch Guard	_____	_____	_____
Receptacles	_____	_____	_____
Receptacle Connections	_____	_____	_____
10A Relay	_____	_____	_____
Relay Connections	_____	_____	_____
Filters	_____	_____	_____
Filter Connections	_____	_____	_____
System Power Switch	_____	_____	_____
System Power Switch Connections	_____	_____	_____
Panel Light	_____	_____	_____
Panel Light Connections	_____	_____	_____
Push Switches	_____	_____	_____
Push Switch Connections	_____	_____	_____
Rotary Switch	_____	_____	_____
Rotary Switch Connections	_____	_____	_____
Launch Angle Indicator	_____	_____	_____
Circuit Board Assy	_____	_____	_____
Circuit Board Assembly Connections	_____	_____	_____
Indicator Light	_____	_____	_____
Indicator Light Connections	_____	_____	_____
Raise/Lower Switch	_____	_____	_____
Raise/Lower Switch Connections	_____	_____	_____
Electric Wire	_____	_____	_____
Wire Connections	_____	_____	_____
Container, Top	_____	_____	_____
Container , Bottom	_____	_____	_____
Gasket, Container Joint	_____	_____	_____

LIST OF REPAIR PARTS AND ASSEMBLIES REQUIRED FOR REPAIRS APPENDIX B

17 SEPTEMBER 2001

MK154 Serial number: _____

THIS BELOW SPACE IS FOR COMMENTS AND OBSERVATIONS AFTER THE INSPECTION HAS BEEN COMPLETED. Please annotate and initial.

[illegible]

LIST OF DEFECTIVE PARTS AND ASSEMBLIES

APPENDIX B

COMPONENT	REMARKS:
Mast Assy	
External-Actuator Cover	
Actuator Arm Lever	
Housing to Actuator Assy	
Hose Assy, Starboard	
Starboard Actuator Manifold	
Starboard Actuator Assy	
Housing-Actuator Hydraulic Hse Assy, Port	
Housing - Actuator Hydraulic System, Port	
Port Actuator Manifold	
Port Actuator Assy	
Starboard/Port Hinge Arm	
Starboard Door Assy	
Door Seals	
Door Latch Rod, Starboard Door	
Port Door Assy	
Wiring Harness W16	
Platform, Equipped for Access	
Launcher Cylinder Hydraulic Hose Assy	
Launch Cylinder Hose Assys	
Launcher Cylinder	
Launcher Cylinder Swivel Joint	
Elevation Cylinder Hose Assys	
Elevation Cylinder Swivel Joint & Elbows	
Elevation Cylinder Assy	
Elevation Cylinder Manifold	
Elevation Cylinder	
Turnbuckle Connecting Rod	
Elevation Cylinder Linkage Adjustment	
Connecting Rod	
Pivot Pin	
Pivot Bearings	
Center Sheath	
Shield	
Launcher Platform Rail	
Travel Lock Assy	
Pivot Assy	
Bumper	
Stop	
Bracket, Connecting Rod	
Mercury Switch Box	
Pendulum Box Assy	
Rockets Power Distribution Box	
Rocker Arm	
Support Arm	
Arm Sheath Port/Starboard	
Intermediate Sheath	

LIST OF DEFECTIVE PARTS AND ASSEMBLIES

APPENDIX B

COMPONENT

REMARKS:

Sequence Lock Manifold
Sequence Lock Manifold Hydraulic Assy
Support Arm Tube Assys
Elbow
Elbow Bracket
Three-Hole Bulkhead Tube
Angle Mounting
Launcher Housing
Tube Assys
Junction Box A
Junction Box B
Limit Switch
Limit Switch Arm Bracket
Wiring Harness W15
Latch Pivot Bracket
Latch Spring
Test Plugs
Nipple
Coupler
Lower Seal
Sheath
Intermediate Housing Sheath
Port Housing Guard Starboard Housing
Guard
Forward Port Housing Guard
Aft Port Housing Guard
Forward Starboard Housing Guard
Aft Starboard Housing Guard
Port/Starboard Bar
Swivel Elbow (Port H2)
Tie-Down and Adapter Assy
Tie-Down Adapter
Tie-Down Assy Aft Wall
Guard Aft Guard Assy Aft Port Guard Aft
Starboard Guard Forward Guard Assy Cable
Guide Starboard Cable Guide Aft Port Cable
Guide Lower Engine Access Cover Latch
Upper Engine Acc Cover Strike Rail
Center Channel Assy
Aft Pallet Rail Tie-Down Bracket
Port/Starboard Ramp
Rear Pallet Assy
Wear Plate
Quick Release Pins
Starboard Ramp Crossmember
Ramp Wear Plates
Aft Pallet

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

LIST OF DEFECTIVE PARTS AND ASSEMBLIES

APPENDIX B

COMPONENT

REMARKS:

Forward Pallet Assy
 Housing to Forward Pallet Hose Assys
 Capstan Hydraulic Hose Assys
 Forward Pallet Rail Tie-Down Bracket
 Quick Disconnect Coupler Fitting
 Power Distribution Box Assy
 Quick Disconnect Nipple Fitting 200A
 Circuit Breaker
 2A Circuit Breaker
 10A Circuit Breaker
 200A Relay
 10A Relay
 Terminal Block Indicator Light Assy
 Toggle Switch Slave Plug Capstan with
 Hydraulic Motor Assy Capstan Drum
 Reduction Gearbox
 Reduction Gearbox Lubricating Oils
 Reduction Gearbox Oil Change
 Hydraulic Filter Change
 Capstan Hydraulic Motor
 Hydraulic Power Unit
 Manual Hydraulic Pump
 Manual Hydraulic Pump Handle
 Electric Motor/Hydraulic Pump
 Electric Motor/Hydraulic Pump
 Control Manifold
 Reservoir Assy
 Sight Glass
 Relief Valve
 Pressure Gauge
 Manual Pump Outlet Tube
 Manual Pump Inlet Tube
 Clip Spring
 Hydraulic Pump Inlet Tube
 Hydraulic Pump Outlet Tube
 Wiring Harness W12
 Wiring Harness W13
 Wiring Harness W14
 Arm Switch
 Control Box
 Control Bx & Mounting Brackets Assy
 Brackets
 Lamps
 Selector Knob
 Toggle Switch Guard
 Receptacles
 Receptacle Connections

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There is no text or other markings on the paper.

LIST OF DEFECTIVE PARTS AND ASSEMBLIES

APPENDIX B

COMPONENT

REMARKS:

10A Relay

Relay Connections

Filters

Filter Connections

System Power Switch

System Power Switch Connections

Panel Light

Panel Light Connections

Push Switches

Push Switch Connections

Rotary Switch

Rotary Switch Connections

Launch Angle Indicator

Circuit Board Assy

Circuit Board Assy Connections

Indicator Light

Indicator Light Connections

Raise/Lower Switch

Raise/Lower Switch Connections

Electric Wire

Wire Connections

Container, Top

Container , Bottom

Gasket, Container Joint

ADDITIONAL OBSERVATIONS:

LIST OF REPAIR PARTS AND ASSEMBLIES REQUIRED FOR REPAIRS APPENDIX C

17 SEPTEMBER 2001

MK154 Serial number: _____

ADDITIONAL COMMENTS AND OBSERVATIONS: Please annotate and initial.

[illegible]

**LIST OF REPAIR PARTS AND
ASSEMBLIES REQUIRED FOR
REPAIRS
APPENDIX C**

17 SEPTEMBER 2001

COMPONENT**REMARKS:**

Mast Assy
External-Actuator Cover
Actuator Arm Lever
Housing to Actuator Assy Hose
Assy, Strbrd Starboard Starboard
Actuator Manifold
Starboard Actuator Assy
Housing-Actuator Hydraulic Hse
Assy, Port
Housing - Actuator Hydraulic
System, Port
Port Actuator Manifold
Port Actuator Assy
Starboard/Port Hinge Arm
Starboard Door Assy
Door Seals
Door Latch Rod, Starboard Door
Port Door Assy
Wiring Harness W16
Platform, Equipped for Access
Launcher Cylinder Hydraulic Hose
Assy
Launch Cylinder Hose Assys
Launcher Cylinder
Launcher Cylinder Swivel Joint
Elevation Cylinder Hose Assys
Elevation Cylinder Swivel Joint &
Elbows
Elevation Cylinder Assy
Elevation Cylinder Manifold
Elevation Cylinder
Turnbuckle Connecting Rod
Elevation Cylinder Linkage
Adjustment
Connecting Rod
Pivot Pin
Pivot Bearings
Center Sheath
Shield
Launcher Platform Rail
Travel Lock Assy
Pivot Assy
Bumper
Stop
Bracket, Connecting Rod
Mercury Switch Box Pendulum Box
Assy
Rockets Power Distribution Box

APPENDIX C

C-2

LIST OF REPAIR PARTS AND
ASSEMBLIES REQUIRED FOR
REPAIRS

17 SEPTEMBER 2001

APPENDIX C

COMPONENT

REMARKS:

Rocker Arm Support Arm Arm
Sheath Port/Starboard Intermediate
Sheath
Sequence Lock Manifold
Sequence Lck Manifold Hydraulic Asy
Support Arm Tube Assys
Elbow
Elbow Bracket Three-Hole Bulkhead
Tube Angle Mounting
Launcher Housing Tube Assys
Junction Box A
Junction Box B
Limit Switch
Limit Switch Arm Bracket Wiring
Harness W15
Latch Pivot Bracket
Latch Spring
Test Plugs
Nipple
Coupler
Lower Seal
Sheath
Intermediate Housing Sheath
Port Housing Guard Starboard
Housing Guard
Forward Port Housing Guard
Aft Port Housing Guard
Forward Starboard Housing Guard
Aft Starboard Housing Guard
Port/Starboard Bar
Swivel Elbow (Port H2)
Tie-Down and Adapter Assy
Tie-Down Adapter
Tie-Down Assy Aft Wall Guard Aft
Guard Assy Aft Port Guard Aft
Starboard Guard Forward Guard Assy
Cable Guide Starboard Cable Guide
Aft Port Cable Guide Lower Engine
Access Cover Latch Upper Eng
Access Cover Striker Rail
Center Channel Assy
Aft Pallet Rail Tie-Down Bracket
Port/Starboard Ramp
Rear Pallet Assy
Wear Plate
Quick Release Pins
Starboard Ramp Crossmember
Ramp Wear Plates

APPENDIX C

**LIST OF REPAIR PARTS AND
ASSEMBLIES REQUIRED FOR
REPAIRS****17 SEPTEMBER 2001****APPENDIX C****COMPONENT****REMARKS:**

Aft Pallet
Forward Pallet Assy
Housing to Forward Pallet Hose Assy
Capstan Hydraulic Hose Assys
Forward Pallet Rail Tie-Down
Bracket
Quick Disconnect Coupler Fitting
Power Distribution Box Assy
Quick Disconnect Nipple Fitting
200A Circuit Breaker
2A Circuit Breaker
10A Circuit Breaker
200A Relay
10A Relay
Terminal Block Indicator Light Assy
Toggle Switch Slave Plug Capstan
with Hydraulic Motor Assy Capstan
Drum Reduction Gearbox
Reduction Gearbox Lubricating Oils
Reduction Gearbox Oil Change
Hydraulic Filter Change
Capstan Hydraulic Motor
Hydraulic Power Unit
Manual Hydraulic Pump
Manual Hydraulic Pump Handle
Electric Motor/Hydraulic Pump
Electric Motor/Hydraulic Pump
Control Manifold
Reservoir Assy
Sight Glass
Relief Valve
Pressure Gauge
Manual Pump Outlet Tube
Manual Pump Inlet Tube
Clip Spring
Hydraulic Pump Inlet Tube
Hydraulic Pump Outlet Tube
Wiring Harness W12
Wiring Harness W13
Wiring Harness W14
Arm Switch
Control Box
Contrl Bx & Mounting Brackets Assy
Brackets
Lamps
Selector Knob
Toggle Switch Guard
Receptacles

APPENDIX C

**LIST OF REPAIR PARTS AND
ASSEMBLIES REQUIRED FOR
REPAIRS
APPENDIX C**

17 SEPTEMBER 2001

COMPONENT**REMARKS:**

Receptacle Connections

10A Relay

Relay Connections

Filters

Filter Connections

System Power Switch

System Power Switch Connections

Panel Light

Panel Light Connections

Push Switches

Push Switch Connections

Rotary Switch

Rotary Switch Connections

Launch Angle Indicator

Circuit Board Assy

Circuit Board Assy Connections

Indicator Light

Indicator Light Connections

Raise/Lower Switch

Raise/Lower Switch Connections

Electric Wire

Wire Connections

Container, Top

Container , Bottom

Gasket, Container Joint

ADDITIONAL NOTES:

(1 Data Item)

The Public reporting burden for this collection of information is authorized to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contract Officer for the contract/PR No. listed in block E.

16. REMARKS	MCSC A)by (CBG)	0	1	0
-------------	-----------------	---	---	---

Distribution Statement A: Approved for public release, distribution is unlimited.

[illegible]

17. PRICE GROUP	
18. ESTIMATED TOTAL PRICE	

G. PREPARED BY: <i>Geralt H. Hall</i>		H. DATE: <i>18 Sep 01</i>	I. APPROVED BY: <i>Geralt H. Hall</i>	J. DATE: <i>18 Sep 01</i>
DD FORM 1423-1, AUG 96 (EG)		PREVIOUS EDITION MAY BE USED		Page 4 of 4

CONTRACT DATA REQUIREMENTS LIST

(1 Data Item)

Form Approved
OMB No. 1704-0188

The Public reporting burden for this collection of information is authorized to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contract Officer for the contract/PR No. listed in block E.

A. CONTRACT LINE ITEM NO.		B. EXHIBIT		C. CATEGORY: TDP TM Other <u>XXX</u>			
D. SYSTEM/ITEM Mine Clearance Launcher MK 154		E. CONTRACT/PR No.		F. CONTRACTOR			
1. DATA ITEM No. B001	2. TITLE OF DATA ITEM Repairable Item Inspection Report			3. SUBTITLE			
4. AUTHORITY (Data Acquisition Document No.) DI-ILSS-80386		5. CONTRACT REFERENCE Paragraph 4.1		6. REQUIRING OFFICE MARCORSSYSCOM, Albany (Code CSLE)			
7. DD 250 REQ. LT	9. DIST STATEMENT REQUIRED A	10. FREQUENCY AS REQ	12. DATE OF FIRST SUBMISSION See Blk 16	14. DISTRIBUTION			
8. APP CODE		11. AS OF DATE	13. DATE OF SUBSEQUENT SUBMISSION See Blk 16	a. ADDRESSEE	b. COPIES		
16. REMARKS				MCSC, Alby (CSLE)	Draft	FINAL	
						Reg	Repro
<p>Block 4 - Contractor format is authorized.</p> <p>Block 10 - A separate report shall be submitted for each Mine Clearance Launcher MK 154 repaired.</p> <p>Block 12 & 13 - Submit report by Marine Corps Serial Number 30 days after completion of each Mine Clearance Launcher MK 154.</p> <p>Block 14 - Reports shall be provided in hard copy form.</p> <p>Distribution Statement A: Approved for public release, distribution is unlimited.</p>					0	1	0
				15. TOTAL			

G. PREPARED BY: <i>Gerall R Hall</i>	H. DATE 18 SEP 01	I. APPROVED BY: <i>Gerall R Hall</i>	J. DATE 18 SEP 01
---	----------------------	---	----------------------

DD FORM 1423-1, AUG 96 (EG)

PREVIOUS EDITION MAY BE USED

Page 1 of 1 Pages
Designed using Perform Pro, WHS/D/G, Aug 96

17. PRICE GROUP
18. ESTIMATED TOTAL PRICE

(1 Data Item)

OMB No. 1704-0188

The Public reporting burden for this collection of information is authorized to average 10 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302 and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503. Please DO NOT RETURN your form to either of these addresses. Send completed form to the Government issuing Contract Officer for the contract/PR No. listed in block E.

[illegible]

17. PRICE GROUP

**18. ESTIMATED
TOTAL PRICE**

G. PREPARED BY: <i>Colt Rott</i>		H. DATE <i>9-5-01</i>	I. APPROVED BY: <i>Donald Hall</i>	J. DATE <i>18 Sep 01</i>
DD FORM 1423-1, AUG 96 (EG)		PREVIOUS EDITION MAY BE USED		Page 1 of 1 Pages